

operation during intermittent operation based on at least a temperature of a specific component that is external to the fuel cell and that contains moisture, as recited by independent claim 1, and similarly independent claim 6.

Specifically, the Office Action asserts at page 5, that "the fuel cell [of Fujio] determines whether to stop power generation only when the ambient temperature meets a threshold or lower." Applicants respectfully disagree.

Fujio describes detecting an external temperature while the operation of the fuel cell is stopped. Power generation is then started if the detected temperature is a predetermined value or less. See Fig. 5, steps 204, 210, and 212. Fujio also describes stopping the power generation of the fuel cell based on a timer. See Fig. 5, steps 212, 214, and 218. As such, Fujio is directed to starting power generation based on temperature measurements, not stopping power generation as asserted by the Office Action. See further, Abstract of Fujio.

Further, Fujio is directed to controlling the starting of a generation operation of the fuel cell if the detected temperature is a predetermined threshold value or less while the operation of a fuel cell system is stopped. In sharp contrast, independent claim 1, and similarly independent claim 6, recites: "it is determined whether to stop power generation operation during intermittent operation based on at least a temperature...."

As such, Fujio fails to disclose or render obvious the features of independent claim 1, and similarly independent claim 6. Wheat and Iwaski fail to cure these deficiencies.

#### **B. Dependent Claim 2**

The Office Action relies on Wheat to cure the deficiencies of Fujio as allegedly rendering obvious "a specific component that is at least one of a valve, a passage, and humidifier arranged in a flow path for a fuel gas or an oxidizing gas," as recited by dependent claim 2. The office Action relies on Wheat's measuring of the water temperature as col. 3, lines 25-32 of Wheat, in addition to asserting at page 6 that: "Fugio [sic] discloses that the water tank

humidifies the anode [0021] and receives the anode exhaust, and thus reads on Applicant's [sic] 'arranged on a flow path for a fuel gas' of claim 2."

However, Applicants respectfully submit that (1) Wheat does not disclose a specific component that is at least one of a valve, a passage, and humidifier arranged in a flow path for a fuel gas or an oxidizing gas, and (2) the water tank 56 of Fujio is not arranged in a flow path for a fuel gas or an oxidizing gas merely because it receives the anode exhaust.

As presented in Applicants' previous response, Wheat does not describe or even contemplate that the water tank 150 (alleged specific component) is in a flow path for a fuel gas or an oxidizing gas. Nowhere in Wheat is it described that the water tank 150 is placed anywhere on a flow path from the air supply 112 to blower motor 110 nor from the blower motor 110 to the fuel cell stack 102. Additionally, nowhere in Wheat it is described that the water tank is placed anywhere on a flow path from the bulk hydrogen storage 120 to the fuel cell stack 102.

Further, Fujio describes hydrogen supply pipe 46 supplying hydrogen to anode side air space 14 and the supplying of air to the cathode side air space 16 by fan 52 and the pipe connecting the fan to the cathode side air space 16. See Fig. 2 and paragraph [0020]. The water flowing from the water tank 56 is supplied to the anode side air space 14 through feed pipe 70 and joint tubing 72. Wastewater then exits the anode side air space 14 thought joint tubing 74 and drain pipe 76. Exhaust is expelled from the anode side air space 14 through exhaust pipe 78 connected to the water tank 56. Finally, exhaust is expelled from the system through exhaust pipe 82. See Figs. 2 and 3 in addition to paragraphs [0020]-[0025].

Accordingly, Applicants respectfully submit that the mere fact that the water tank 56 of Fujio receives exhaust does not indicate that it is in a flow path for a fuel gas or an oxidizing gas. Specifically, exhaust in Fujio is described as made up of the byproducts created by the fuel cell reactions, in addition to hydrogen that did not react. These gases are expelled from the

system and routed to mixer 84, which prepares the exhaust for expulsion from the system through exhaust air section 38. See paragraph [0026]. As such, once the gases of Fujio have passed through the fuel cell, whether they are byproducts or unspent hydrogen, they are no longer one of a fuel gas or an oxidizing gas, they are exhaust. The exhaust of Fujio is not a fuel gas nor is it an oxidizing gas.

Accordingly, Fujio and Wheat do not describe a specific component that is at least one of a valve, a passage, and humidifier arranged in a flow path for a fuel gas or an oxidizing gas, as recited by dependent claim 2. Iwaski also fails to cure these deficiencies.

**C. Summary**

Applicants respectfully submit that the applied references, taken alone or in any combination, fail to disclose, teach, or render obvious each and every element of claims 1, 2, and 6. As such, claims 1, 2, and 6 are patentable. Further, dependent claims 2-5, 7, and 8 are also patentable at least for their dependencies on either of independent claims 1 or 6 as well as for the additional features they recite.

As such, Applicants respectfully request withdrawal of the rejections.

**II. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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